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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,511	05/16/2001	Chieh-Sheng Chen	3722-0105P	9432
2292	7590	04/01/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			LE, LANA N	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/855,511

**Applicant(s)**

CHEN ET AL.

**Examiner**

Lana N Le

**Art Unit**

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 is/are allowed.
- 6) ☒ Claim(s) 1 and 4 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 10/07/04 have been fully considered but they are not persuasive.

Regarding claim 1, applicant's arguments state the power detector 170 of the admitted prior art is used only for detecting power of the power coupler.

However, the detected power not only for detecting the power of the power coupler 180 but also for detecting the output power of the amplifiers (110, 120, 130) outputted to the power coupler.

Regarding claim 2, it is the objected claim made independent, and is therefore allowable for the reason as set forth in the previous office action filed 07/07/04.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by the admitted prior art.

Regarding claim 1, the admitted prior art (figure 1) discloses an apparatus of power controlling in a transmitter (100, 170) for receiving an emission signal and outputting to an antenna 190, comprising:

a plurality of stage amplifiers (110, 120, 130) for receiving the emission signal and amplifying the power thereof (specification in description of related art section (page 1, lines 14-23);

a plurality of matching circuits (140, 141, 142) connected between the stage amplifiers (110, 120, and 130) for matching with the stage amplifiers, respectively, (specification in description of related art section, page 1, lines 10-23);

at least one power detector 170 for detecting the power of the at least one stage amplifier and generating a detection signal, (specification in description of related art section, page 2, lines 1-4), and

a bias control circuit (150, 151) for receiving the detection signals of the at least one power detector 170, thereby generating a bias (APC1, APC2) of each of the stage amplifiers in order to optimize the efficiency of each of the stage amplifiers according to the magnitude of the power of each of the stage amplifiers (page 1, line 19 - page 2, line 18). The above portion states that an amplifier possesses high efficiency at high power output since the claims do not require that the amplifier possesses high efficiency at low output, the admitted prior art reads on the claim language.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Chorey et al (US 6,154,664).

Regarding claim 4, the admitted prior art (figure 1) discloses an apparatus of power controlling in a transmitter (100, 170) for receiving an emission signal and outputting to an antenna (190), comprising:

a plurality of stage amplifiers (110, 120, 130) for receiving the emission signal and amplifying the power thereof (specification in description of related art section (page 1, lines 14-23);

a plurality of matching circuits (140, 141, 142) connected between the stage amplifiers (110, 120, and 130) for matching with the stage amplifiers, respectively, (specification in description of related art section, page 1, lines 10-23);

a bias control circuit (150, 151) for receiving the detection signals of the power detector, thereby generating a bias (APC1, APC2) of each of the stage amplifiers in order to optimize the efficiency of each of the stage amplifiers according to the magnitude of the power of each of the stage amplifiers (page 1, line 19 - page 2, line 18). The above portion states that an amplifier possesses high efficiency at high power

output since the claims do not require that the amplifier possesses high efficiency at low output, the admitted prior art reads on the claim language.

However, the admitted prior art fails to further disclose: a plurality of power detectors for detecting the power of the amplifiers and generating detection signals.

Chorey et al disclose: a plurality of power detectors 52, 54, 56, 58 (fig. 7; col 15-20) for detecting the power of the amplifiers and generating detection signals.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the power detector of the admitted prior art with a plurality of power detectors in order to be able to detect the power of each amplifier for more accurate power detection of each individual amplifier and sum the power rather than detecting with one power detector.

#### **Allowable Subject Matter**

6. Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 5, the admitted prior art discloses the apparatus according to claim 4. However, the cited prior art fails to further disclose the bias control circuit comprises a comparator, thereby outputting a bypass control signal when the power controller is disabled.

7. Claims 2-3 are allowable over the cited prior art.

8. The following is an examiner's statement of reasons for allowance:

Regarding claim 2, it is allowable due to the objected claim 2 made independent for the reason as set forth in the last office action, filed 07/07/04.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lana N Le whose telephone number is (703) 308-5836. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lana Le

March 9, 2005



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